# Paris Conference 2017 What is Literariness?

Titles, Abstracts, & Short Bios

#### David S. Miall, University of Alberta

I was born and raised in the countryside in Sussex, in England, which I have since regarded as a principal component of my later interests, particularly the writing of the poets Wordsworth and Coleridge. This led me to specialize in Romantic literature, and to the study of the experiential perspective afforded by literary reading.

# The experience of literariness

In this presentation I argue for the view that literary reading is distinctive in relation to other linguistic and media experiences, and that this capacity rests in part on the embodied nature of our responses to literariness (as I will term it). Among other features, the distinctiveness of literature is indicated by its transcultural appearance (demonstrated by Hogan 2003), its transhistorical nature (Rose 2001), and (where conditions permit) the continuity of literary experience from infancy to adulthood (Dissanayake & Miall 2003). I suggest that the foundations of literary experience are developed in two primary realms: response to literary language (characterized as foregrounding, Miall & Kuiken 1994), and the emotions that shape narrative understanding (Miall 2011), which appear in the form of empathy and absorption. In support of these views I consider empirical evidence, both experimental work conducted with literary readers, and neuropsychological evidence, such as evoked response potentials (ERPs), that provide support for the distinctiveness of literary processing. Evidence will be drawn from three specific areas that evoke experiences of literariness: the unreliable narrator, the ambiguity of literary language, and the hypothesis (still speculative) that humans are richly endowed with mirror neurons.

# Mark J. Bruhn, Regis University

Professor of English at Regis University, Mark Bruhn edited Cognition, Literature, and History (2014) and a special double-issue of Poetics Today on "Poetics and Cognitive Science" (2011). Related work has appeared in European Romantic Review, Studies in Romanticism, The Wallace Stevens Journal, and The Oxford Handbook of Cognitive Literary Studies.

# The Proof in the Pudding: On the Empirical Values of Literary Interpretation

A prominent cognitivist critic has recently stated as axiomatic that, due to "insurmountable differences between cognitive science and literary interpretation," "a given reading of a literary work cannot contribute to a scientific project *as is*" (Caracciolo 2016). This may seem a surprising concession, but it proceeds from the same theoretical "contrast between interpreting literature and experiencing it" that David Miall himself

insisted upon throughout *Literary Reading* (2006). In Miall's view, there is literary reading, a process, and there are literary readings, products of that process, or interpretations. For Miall, Caracciolo, and many others, an empirical approach that searches for law-like regularities may explain the *nomological* process of literary reading but not the *idiographic* products of literary interpretation. Following van Peer et al. 2007, who reject this distinction in principle, and Miall himself, some of whose empirical protocols with ordinary readers would appear to be readily translatable to professional interpretations, this talk will present a theoretical case for, and corresponding methodological illustrations of, the empirical values of literary interpretation, especially for the question of "literariness."

Caracciolo, Marco. 2016. "Cognitive Literary Studies and the Status of Interpretation." *NLH* 47.1: 187-207.

Miall, David. 2006. *Literary Reading: Empirical and Theoretical Studies*. New York: Peter Lang.

van Peer, Willie, Jèmeljan Hakemulder, and Sonia Zyngier. 2007. *Muses and Measures: Empirical Research Methods for the Humanities*. Newcastle: Cambridge Scholars.

# Nigel Fabb, University of Strathclyde

Professor of literary linguistics at the University of Strathclyde (UK), Fabb was educated at Cambridge (English literature) and MIT (linguistics). Editor of *Journal of Linguistics* 1997-2014. Currently (2014-17) a Leverhulme Fellow working studying epiphanies from a psychological and literary linguistic perspective. Author of ten books on linguistics and literature.

#### Epiphany as elaborated surprise, and the literary techniques which produce it

I argue that a range of kinds of experience - Joyce's epiphany, Woolf's moment of being, Burke's and Kant's sublime, James's mystical experience, Laski's ecstasy, Maslow's peak experience, Keltner and Haidt's awe, etc. - all share the same core psychology: they are all variants of surprise. Surprise is a response to a perception of an event as schemadiscrepant (or, I suggest, an object as category-discrepant), either violating an expectation (Reisenzein) or incoherent with existing knowledge (Foster and Keane). Surprise gives these experiences their associated emotions/arousals (Huron), and also their characteristic ineffability because a perception can only be put into words if it fits a category or schema. The common experience of surprise is in these rare cases elaborated, by attribution to a trigger, reflecting on its meaning, naming it, and making it an episode of the story of the self: elaboration draws on historically specific knowledge to construct different kinds of experience, all from the same psychological source of surprise. Following Burke, Kuiken, Miall and others, I examine how literary techniques are used to produce category- and schema-discrepant objects and events, including metaphor, parallelism, hyperbole, synecdoche, and event structure violation. These techniques are used to produce the epiphanic effects of literature.

#### Frank Hakemulder, Utrecht University

Frank Hakemulder has a background in literary theory and comparative literature. He specializes in the psychology of literature and media. His focus is on effects of

reading literary texts on beliefs. Currently he studies effects on self-concept and social perception, and the potential applications in literary education and management training.

# Conceptualizing foregrounding: An interdisciplinary research program

The present paper will attempt to synthesize various efforts to conceptualize foregrounding. For this, it is proposed, we need to distinguish (1) foregrounding as *textual features* (2) foregrounding as perception, that is, instances in which recipients' *perceive* an element in the text as a deviation; and (3) foregrounding as an *experience*, that is, how recipients sense or undergo the perceived deviation. The available research will be reviewed from this perspective, revealing a consensus about the concept (amidst terminological confusion and seemingly contradictory approaches), and generating central issues for an interdisciplinary research program. In the concluding part of the paper we will focus on the practical uses of reading literature in social contexts, in particular those of literary education and management training.

# David I. Hanauer, Indiana University of Pennsylvania

David I. Hanauer is an educational researcher and the Lead Assessment Coordinator of the SEA-PHAGES Program at the Pittsburgh Bacteriophage Institute and a Professor of Applied Linguistics at Indiana University of Pennsylvania. His research addresses science and literacy education and explores issues of poetry reading and writing, autoethnography, assessment in the sciences, teaching of scientific inquiry, scientific writing in first and second languages, and linguistic landscapes. Dr. Hanauer is the author of seven books and his articles have been published in Science, CBE-LSE and a wide range of applied linguistics, literacy and educational journals. He has received funding from the NSF, HHMI and the US Department of Education. Dr. Hanauer is editor of the Scientific Study of Literature journal and the Language Studies, Science and Engineering book series with John Benjamins

# Intermediate states of literariness: Criticality and literariness in the factual (ethnographic) poem and the fictional prose paragraph

Literariness can be activated through two basic mechanisms: 1) The presence of linguistic foregrounding; & 2) The sociological positioning of a text as literary. However, these literariness mechanisms do not necessarily co-occur. The current study utilized data from a poetic ethnography corpus of US soldiers' experiences in the 2nd Iraq war (Hanauer, 2015). Two sections from different soldier experiences were presented in four different versions: *Poetic Ethnography* - Poetic form with introduction as literary; *Prose Narrative Ethnography* - Narrative interview form with introduction as factual; & *Literary Prose Narrative* - Narrative with introduction as literary. 215 US participants were randomly presented with one of the four versions (from one of the two experiences) and asked to read it carefully. In a preand post-reading design, participants responded to critical rating scales dealing with US military involvement and rated poeticity, literary quality, accuracy, empathy, sympathy

character perspective taking, and social understanding in a post condition only. The conclusions of the study suggest that the intermediate state of *Poetic Ethnography* was conducive to the elicitation of empathy, sympathy and critical understanding of character's psychological states; while the intermediate state of *Literary Prose Narrative* did not elicit the responses characteristic of literariness. These results can be interpreted in line the with research on fact/fiction distinctions and the outcomes of literariness

# Arthur M. Jacobs, Free University Berlin

Arthur Jacobs is full professor and founding director of the Dahlem Institute for Neuroimaging of Emotion (D.I.N.E.) at Freie Universität Berlin (FUB). He directed the ,Emotions and Language' area in the interdisciplinary research cluster 'Languages of Emotion' and teaches Experimental and Neurocognitive Psychology. Author and co-author of over 250 scientific publications, in 2011 he also published the book Gehirn und Gedicht: Wie wir unsere Wirklichkeiten konstruieren (Brain & Poetry: How we construct our realities; München: Carl Hanser Verlag) together with the Austrian poet Raoul Schrott.

# Reader responses to style in poetry: A neurocognitive poetics perspective

Style as a multidimensional, multifacetted feature of authors and texts theoretically can have effects on reader responses and experiences at all levels of empirical inquiry, i.e., neuronal, behavioral, and experiential. It has been argued that style effects are a product of both bottom-up and top-down processes, e.g., the manipulation of specific stylistic devices in a text, as well as of internal representations (schemas) of style features, abstracted from previous culturally coined literary encounters with author-text environments (so-called style motifs; Burke, 2013).

The Neurocognitive Poetics Model of literary reading (NCPM, Jacobs, 2011, 2015a,b) allows testable predictions regarding multilevel effects of style, e.g. in poetry reception. With a special look at such "style motifs", in this paper I will summarize computational and empirical work testing these predictions from studies using two large German poetry corpora and one large English corpus: i) a corpus comprising 24 mood poems from three centuries (Jacobs et al., 2016; Lüdtke et al., 2014); ii) a corpus of 57 poems from the volume "verteidigung der wölfe" (defense of the wolves) by Hans Magnus Enzensberger (1957; Aryani et al., 2016); and iii) the 154 sonnets by Shakespeare (Jacobs et al., 2017).

#### Don Kuiken, University of Alberta

Don Kuiken is a professor in the Department of Psychology at the University of Alberta (Edmonton, Canada). He has published chapters and articles in the areas of dreaming, psychological aesthetics, and phenomenological psychology. He teaches courses on Psychological Studies of Dreaming and Psychological Aesthetics.

# Living metaphor as the site of bidirectional literary engagement

Articulation of an interactive model of literariness requires separate specification of (1) a text's mode of representation, (2) a reader's mode of engagement, and (3) the generative (e.g., generative, expressive) effects of their interplay. A model of metaphoricity

currently under development (cf. Kuiken & Douglas, 2016) differentiates metaphoric modes of representation (e.g., metaphoric noun-noun compounds; simple sentential metaphors) and quasi-metaphoric modes of representation (e.g., linguistic markers of optional metaphoric construal). These modes of representation function at several levels of complexity (ranging from noun-noun compounds to prosodic/semantic structures across discontinuous passages). Also, this model differentiates two primary modes of reader engagement: an explication-centered mode of reflection (expressive enactment) and an inference-centered mode of reflection (integrative comprehension). Finally, this model locates the generativity of literary reading within the interplay between expressive enactment and metaphoric modes of representation. Evidence to date suggests that, within this interplay, readers report inexpressible realizations and a temporal progression leading through the tensions between the "is" and "is not" of metaphoric structures and toward the emergent meanings of "living metaphor" (Ricoeur, 1981). Thus, the generativity of literary reading is located within the departures from "conventionality" that comprise emergent meanings, rather than within depth of processing triggered by "deviant" modes of representation.

# Gerhard Lauer, University of Göttingen

Gerhard Lauer is currently professor of German studies at the University of Göttingen. He has worked on literary history, digital humanities, and cognitive poetics. He is co-founding editor of the "Journal of Literary Theory" and has recently turned to the empirical study of literature (s. references).

#### How does literariness develop? An ontogenetic approach

In David Miall's and Ellen Dissanayake's seminal paper "The Poetics of Babytalk" of 2003 both researchers explore for the first time the poetic function of motherese. In line with the social cognitive approach by Bowlby, Stern, Trevathen, and others, Miall and Dissanayake show how macro- and micro-poetic elements (i.e. episodes, themes, rhythm, contour, pitch, verse, use of vocals etc.) have an adaptive function for developing basic human abilities like mutual attachment, joint attention, and theory of mind. My talk will take Miall's and Dissanayake's paper as a starting point to draft a larger research programme. I ask what are the major proto-aesthetic developmental states children run through, what are the main feature of foregrounding of each of the states, and how could we test the states in detail. Accordingly, my basic assumption is that the development of the human mind explains literariness. Literature could be understood as an alterocentric gestalt, - an approach, which combines formalism/structuralism and developmental psychology (like Bråten 2007). This includes the notion (with Mithen 2007) that music, not language comes first and proposes an ontogentic logic with distinct states from first eye blink dialogues to fully-fledged literature, yet not researched. I call this programme a research programme on the development of story literacy.

Winfried Menninghaus, MPI for Empirical Aesthetics (Frankfurt am Main) Winfried Menninghaus is Director of the Max Planck Institute for Empirical Aesthetics (Frankfurt am Main). Fields of research: classical rhetoric/poetics, philosophical, evolutionary, and empirical aesthetics. His books include studies on

the role of Disgust (2003) in aesthetics, on The Promise of Beauty (2003), Hölderlin (2005) and Aesthetics after Darwin (2011).

# Poetic speech melody: A crucial link between music and language

Since antiquity, poems have been called "songs", and poets "singers". These designations suggest that poems feature not only an analogue of musical meter, but also another indispensable property of songs, namely, melodic contours beyond the prosody of single sentences. To date, however, an overarching poetic speech melody beyond and above the sentence level has not been an object of research in empirical studies on the music—language interface. My talk will present poetic speech melody as an objectively measurable construct that predicts important dimensions of readers' impressions of poetry.

#### Yeshayahu Shen, Tel Aviv University

Yeshayahu Shen is a Professor in the Program of Cognitive Studies of Language and its Use, and in the department of Literature at Tel Aviv University. His main areas of research are discourse and narrative comprehension, figurative language comprehension, cognitive poetics, the empirical study of literature, metaphor and conceptual structure, and the relation of language and thought.

#### Structural invariance in poetic synaesthetic metaphors

Many literary scholars, notably foregrounding theorists, suggest that poetic language in general, and figurative language in particular, deviate from norms characterizing the ordinary use of language, and that this deviation interferes with ordinary cognitive processes, resulting in various aesthetic effects (e.g., Short, 1973; van Peer, 1986). However, a crucial (though relatively neglected) question that immediately arises is: How far can the deviation go? In particular, are there levels/aspects of figurative language that are 'resistant' (or 'immune') to deviation and remain universally invariant, across different contexts and time periods? This general question will be addressed in this talk by an analysis of a special type of metaphor, namely synaesthetic metaphors, that is, metaphors in which target and source domains are associated with different sensory modalities, as in 'rough sound' or 'cold light'.

Extending Ullman's (1945, 1959) seminal study on synaesthetic metaphors in three corpora of European poetry, it will be proposed that a universal invariant aspect of synaesthetic metaphors is the direction of mapping, namely from lower sensory modalities (i.e., touch and taste) onto higher ones (i.e., sight and sound) as in 'cold light'. I will briefly survey the findings of studies of culturally diverse poetic corpora that may suggest that the 'low to high' mapping is, invariably, much more frequently used than its counterpart across various contexts of culture, language, geography, genre, and poetic school. Furthermore, a comparison between biblical and post-biblical Hebrew corpora suggests that this pattern remains invariant across remote time periods of the same language, thus resisting the well-documented principle of novelty as a major principle underlying literary evolution (e.g., Martindale & Locker, 2009).

Based on a series of psychological experiments, it is further proposed that the more frequently used structure is cognitively simpler (e.g., easier to interpret, better recalled, judged as more natural) than its counterpart. A cognitive account for the findings will be proposed, based on recent work in the area of embodied language processing. Finally, the implications of these findings for the notion of 'literariness' will be discussed.

# Willie van Peer, University of Munich

Willie van Peer is Professor of Literary Studies and Intercultural Hermeneutics at the University of Munich, former President of IGEL (International Association for the Empirical Study of Literature) and a former Chair of PALA (Poetics and Linguistics Association), as well as the founding general editor of the international journal *Scientific Study of Literature*, published by Benjamins.

Co-author: Anna Chesnokova is Professor of the English Philology at Borys Grinchenko Kyiv University, Ukraine. She has published on Empirical Studies of Literature and Stylistics, including *Directions in Empirical Literary Studies* (John Benjamins, 2008, co-edited), chapters for *Teaching Stylistics* (Palgrave Macmillan, 2011) and *Scientific Approaches to Literature in Learning Environments* (John Benjamins, 2016).

#### The Invisible Net (Willie van Peer & Anna Chesnokova)

In the past, several studies have found empirical support for the psychological notion of foregrounding. In this paper we will present the results of a reading experiment investigating descriptive and evaluative reader reactions to a poem, both in its original form (containing rather heavy foregrounding) and a version (from which all foregrounding has been removed). In this sense the research presents a replication of earlier experiments as well as a comparison with some more recent ones that failed to find evidence for the notion of foregrounding. It will also cast light on Bortolussi and Dixon's rereading paradigm.

The results will be combined with a reconsideration of the concept of literariness, which will be confronted with the variety within a reader population, as well as with the diversity within a text corpus. The latter will be confronted with Van Peer's (1991) effort to develop a descriptive definition of literature, incorporating the heterogeneous nature of the corpus of texts that are regarded as literary. Revisiting these aspects of texts and their reception may illuminate persistent problems in the theory of literariness.

Stefan Blohm & Christine A. Knoop, Max Planck Institute for Empirical Aesthetics: Literarinesses: A bag of three-sided coins

Stefan Blohm is a Ph.D. candidate at the MPI for Empirical Aesthetics; he holds an M.A. in General Linguistics/British Studies (JGU Mainz). Unwillingly intrigued by literary theory, and spending too much time thinking about the linguistic description of poetry, he adapts and applies psycholinguistic methods to the study of literature.

Christine A. Knoop is a Senior Researcher at the Max Planck Institute for Empirical Aesthetics (Frankfurt). She holds a Ph.D. in Comparative Literature (UCL), and has previously worked at UCL and Freie Universität Berlin. Her research interests include aesthetic emotion, authorship theories, and experimental approaches to literary aesthetics.

# Literarinesses: A bag of three-sided Coins

Literariness has been approached from three different angles: the study of formal devices of literary language, which dates back to the beginnings of the concept (Jakobson, 1919); the study of literary reading modes and the conventions and prior experiences in which they are grounded; and the study of actual reading experiences.

We postulate (1) that these three aspects are mutually dependent and, in fact, constitute three sides of the same coin, and (2) that different texts and genres instantiate distinct literariness profiles, that is, distinct 'literarinesses'.

Building on previous work in linguistics, stylistics and literary studies, we develop a descriptive theoretical framework that (1) incorporates all three aspects of literariness into one integrative model, and that (2) explicates the notion of 'literarinesses' in terms of the roles and relations of author or reader and text during a number of sub-processes at various stages of literary practice. Published and unpublished empirical data from our research group will instantiate the basic assumptions of our framework by addressing questions of genre expectations, literary text processing and evaluation, all of which are relevant to ascriptions of literariness.

Literature

Jakobson, R. (1973 [originally published in 1919]). Modern Russian Poetry: Velimir Khlebnikov. In: Edward J. Brown (ed.), *Major Soviet Writers: Essays in Criticism*. Oxford: Oxford University Press, pp. 58-82.

Kathy Conklin & Josephine Guy, University of Nottingham: Empirical studies of literariness: understanding the value of authorial revision

Dr. Kathy Conklin is an Associate Professor in Psycholinguistics in the School of English at the University of Nottingham. She is a leading expert in the eye-tracking of language and is one of the few researchers in the world applying eye-tracking to authentic literary texts to address questions of literary significance.

Professor Guy is Head of the School of English at the University of Nottingham. She is a world expert in the fields of text-editing and textual theory, and has published widely on critical controversies associated with definition of literary value, and their consequences for the disciplinary authority of literary studies.

# Empirical studies of literariness: understanding the value of authorial revision

A commonly held assumption of text-editors, creative writers and literary critics is that literary creativity is exhibited through authorial revision. This assumption underwrites many large-scale, digitally-focussed editorial research projects, which aim to record faithfully the (often minute) changes which occur through the processes of textual genesis and textual transmission. These projects are providing a great quantity of new data about the creation of literary works. However, currently there are no systematic methods of determining the differential significance of the vast array of linguistic features that modern editors are committed to recording. Our research represents the first use of scientific methodologies, adapted from psycholinguistics, to investigate empirically the significance, for judgements about literary value, of changes to different kinds of textual features. This includes fine-grained features, such as punctuation, which are not strongly associated with foregrounding, and the recording of which has caused controversy among editors. We show how eye-tracking technology can be used to ascertain whether readers 'notice' different kinds of textual changes; and whether, and under what conditions, they attach significance to them. We also show how this evidence can test hypotheses made by critics and editors about which linguistic features contribute to literary appreciation.

Manon Jones, University of Edinburgh: Neurocognitive responses to prosody Manon Jones obtained a PhD (2008) and conducted post-doctoral research at the University of Edinburgh. She is now a Senior Lecturer in the School of Psychology at Bangor University, with expertise in reading, dyslexia and bilingualism. She is currently researching neurocognitive response to literary reading in skilled and dyslexic groups.

#### **Neurocognitive responses to prosody**

Literary texts use a range of stylistic techniques to engage reader attention. Here, in two independent event related potential (ERP) studies, we examine how manipulations of prosody affect neurocognitive processing, including enhanced attention and modulation of meaning processing. In Study 1, we show that readers with no particular knowledge of a traditional form of Welsh poetry unconsciously distinguish phrases conforming to its complex prosodic rules – evidenced in an enhanced P300 response – from those that violate them. This despite the fact that participants could not explicitly detect differences. These results showed for the first time that the prosodic layering characteristic of this ancient form was unconsciously detected in an attentional orienting response perhaps in an analogous process to the appreciation of music. In Study 2 (data collection in progress), I am leading an investigation into the relationship between sound and the processing of meaning. In simple adjective-noun phrases, we predict that if alliteration

enhances integration of the noun with the preceding adjective, alliteration will increase comprehension – attenuating the N400 –of congruent phrases. These responses are being examined in both skilled reader and dyslexic populations. A re-test session will also elucidate the longer term cognitive influence of stylistic manipulations.

Moniek Kuijpers (presenting author, Max Planck Institute for Empirical Aesthetics) & Frank Hakemulder (Utrecht University): Rereading and literariness

Moniek Kuijpers is a postdoctoral research fellow at the Max Planck Institute for Empirical Aesthetics. Her research is concerned with absorbing literary reading experiences.

Frank Hakemulder is a professor of Media Psychology at Utrecht University and has a background in literary theory and comparative literature.

#### **Rereading and literariness**

Dixon et al. (1993) suggest that literary effects occur over time and hence that appreciation of literary texts typically increases when rereading. Thus, they argued, an increase in appreciation from first to second reading can be used as a litmus test for literariness: only literary texts can lead to increases in appreciation; however emergent effects will not occur after rereading a popular text. We assume, however, that such emergent effects may be indicative of an increase in comprehension following rereading, rather than literary text properties per se. In three rereading experiments (N=97, N=51 and N=49) narratives were presented to participants in two versions: with high frequency and with low frequency of literariness (i.e., either by high levels of phonetic, grammatical and semantic foregrounding or by presence or absence of narratorial ambiguity). In a series of linear mixed model analyses we examined the relationship between comprehension and appreciation, as was the mediating influence of participants' previous print exposure. Results show that an increase in appreciation is not dependent on the level of literariness of the text participants read. Rather, it was mainly correlated with an increase in comprehension. In light of these findings we suggest that a reevaluation of the concept of emergent literary effect is warranted.

Sven Strasen, Julia Vaeßen, & Caroline Kutsch (Aachen University): T-REX: Triggers of reader emotion and experientiality

Sven Strasen is Senior Lecturer in English Literature and Culture and Literary Theory at RWTH Aachen University. He has published on Cognitive Reader-Response Theory, and the reconciliation of cultural and cognitive approaches in literary studies. Currently, he is establishing an interdisciplinary project that will empirically test hypotheses about potential textual triggers of experientiality for different groups of readers.

Julia Vaeßen is a PhD student and research and teaching assistant at the Chair of British Literature at RWTH Aachen University. Specialising in cognitive literary

studies, her dissertation explores the role of cultural models in literary character construction. Further research interests include empirical approaches to literature, Reader-Response Theory, and contemporary narrative fiction.

Caroline Kutsch also is a PhD student and research and teaching assistant at the Chair of British Literature at RWTH Aachen University. With a focus in cognitive literary studies, she investigates textual triggers of experientiality in narrative texts in her dissertation. Other research interests include narratology, feminist approaches to literature and dystopian literature.

#### T-REX: Triggers of reader emotion and experientiality

In our conception, the differentia specifica of literature is not to be found in the text-asproduct but in the aesthetic pleasure readers draw from the reading process. Based on recent research grounded in embodiment and cognition (Caracciolo 2014, e.g. Hutto 2012), we regard experientiality as a central aspect of literariness and understand a text to be experiential to the degree to which it evokes phenomenal memories in readers through the use of particular textual strategies. Existing empirical evidence suggests foregrounding as one of the most important triggers of this this evocation (e.g. Miall 2015), yet there is no consensus on what constitutes triggers of experientiality nor how experientiality can be measured for either text or readers.

We will present a report on the mixed methods project "T-REX: Triggers of Reader Emotion and Experientiality in Literary Texts" which is currently being developed at RWTH Aachen University by a transdisciplinary team of specialists in literary studies, multimodal annotation and cognition, and affective computing. In this project we operationalize experientiality in a way that makes it accessible to empirical investigation and will thus significantly contribute to the theoretical discussion on experientiality and literariness in general. Furthermore, our project design outlines innovative tools that enable us to turn big into smart data through auto-annotation and employ crowd-sourcing for investigating literary-theoretical questions.

A. Mangen (presenting author, University of Stavanger), A. Kuzmičová, J. Lüdtke, L. Magyari, A. Jacobs: Narrative styles and mental imagery

Anne Mangen is professor of literacy at the University of Stavanger, Norway. Her research interests include the effects of digitization on cognitive and emotional aspects of reading, and she is currently involved in empirical research on the interplay between medium, text characteristics and emotional aspects of the literary reading experience.

#### Narrative styles and mental imagery

Mental imagery (i.e., the various instances in which readers of narratives come to experience near-sensory phenomena) is a common phenomenon in literary reading, and typically something people remember about their reading (Kuzmičová, 2014). Nevertheless, there are few empirical studies targeting the specific contributions of

mental imagery, how these relate to other aspects of the literary reading experience, e.g. mental simulation (Willems & Jacobs, 2016), and which text- and reader-related features shape mental imagery phenomena.

The aim of this study was to investigate whether different narrative styles induce different types of imagery or mental simulation as predicted by Kuzmičová's phenomenological typology, never tested empirically before. For this, we collected both direct offline and indirect online measures as proposed in a recent debate on measuring literary experience and response (Dixon & Bortolussi, 2016; Jacobs, 2016a, 2016b; Kuiken, 2016). We also applied both qualitative and quantitative tools to text analysis for predicting readers' responses.

Preliminary results raise important questions regarding both theoretical and methodological aspects of imagery experiences during reading and motivate the development of specific hypotheses for future neurocognitive poetics studies.

Roel M. Willems (Radboud University & Max Planck Institute for Psycholinguistics, Nijmegen): Measuring eye movements to understand the processing of literariness

Roel Willems got his PhD from Radboud University Nijmegen on a thesis concerning the neural integration of speech and co-speech gestures. He moved on to study the neurobiology of language, and of simulation during language in particular. His recent work is on mental simulation during the understanding of literary narratives.

#### Measuring eye movements to understand the processing of literariness

The on-line measurement of eye movements ('eyetracking') has been a rich source of information about cognitive processing during reading. Here I will present results from two independent data sets in which we used eyetracking to assess participants' sensitivity to the amount of literariness in certain parts of a narrative. Participants (N=24) read three short literary stories while eye movements were measured using an infrared eyetracking camera. Post hoc comprehension questions showed that participants had read and understood the narratives. Literariness was established per word, first by asking a literary scholar to indicate literary style figures, and second by asking a group of naïve participants to do the same. We found that there was an overall effect of slowing down (longer fixation times) when participants encountered more 'literary' parts of the text, but that this overall effect was best characterized by large inter-individual differences. We failed to find a relationship between slowing down of literary parts of the story and appreciation of the story. We are currently testing a much larger sample using a similar approach to see if individual differences in sensitivity to style can be related to appreciation and comprehension of literary narratives.

Yehong Zhang (Tsinghua University): Literariness in cross-cultural poem reading

Yehong Zhang is Associate Professor in the Department of Foreign Languages and Literature, Tsinghua University, Beijing. She specializes in cognitive literary

studies, cross-cultural empirical literary studies and contemporary literary theories. She was visiting scholar at University of California, Berkeley, and obtained Humboldt research fellowship.

#### Literariness in cross-cultural poem reading

Study on literariness originates from poetry study. Poetry contains various devices, such as meter, rhyme, wording and phrasing. This presentation focuses on cross-cultural literary reading. After translation, most of the original rhymes and meters no longer exist. However, poems still obtain positive reaction in the target culture. Why are poems, after being translated, still beloved by people in the other culture, although lots of the devices of literariness disappeared in the course of translation? What is the key element between the original form and the translated form of poems, which engage readers cognitively and emotionally more in the reading? How can the literariness be embodied in the translated literary work, especially in poems? To probe into these questions, an empirical study on cross-cultural poem reading has been carried out. The results indicate the elements for poetic function in cross-cultural literary reading.